FREEDM® Loose Tube, Gel-Free Cable, Riser

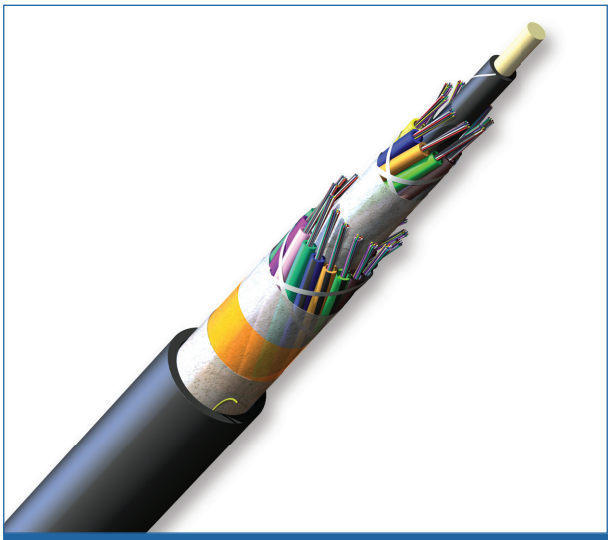
288 F, 50 µm multimode, extended 10G distance (OM4)

CORNING

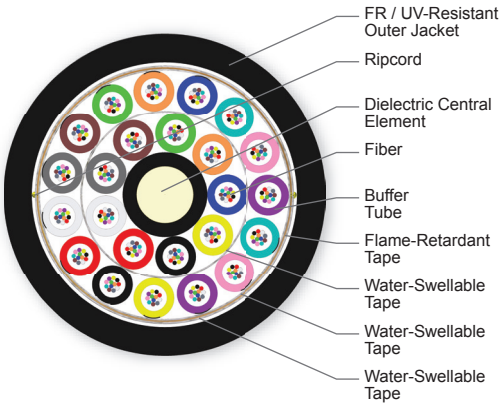
Corning FREEDM® loose tube gel-free riser cables are flame-retardant, indoor/outdoor, riser-rated cables designed for interbuilding and intrabuilding backbones in aerial, duct and riser applications. These cables are protected against water penetration by innovative waterblocking materials that swell to absorb water. Waterblocking without the use of messy gels provides more efficient and craft-friendly cable preparation. It also makes cable access easier and simplifies the use of buffer tube fan-out kits.

The buffer tubes and fibers in each tube are color coded for quick, easy identification. The SZ-stranded, loose tube design isolates fibers from installation and environmental rigors and allows for easy mid-span access. The cable design is also National Electrical Code® (NEC®) listed (OFNR and FT-4). The all-dielectric cable construction requires no grounding or bonding, and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip.

Note: This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



Part Number: 288TUF-T4191D20



Cross Section of Part Number: 288TUF-T4191D20

Features and Benefits

Gel-free waterblocking technology
Craft-friendly cable preparation

Loose tube design
Mechanical ruggedness and environmental durability

Color-coded tubes and fibers
Quick and easy identification

All-dielectric construction
Requires no grounding or bonding

Common installations
Outdoor lashed aerial and duct; indoor vertical riser and general purpose horizontal according to National Electrical Code (NEC) Article 770

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Standards

Listings	National Electrical Code® (NEC®) OFNR
Design Criteria	CSA OFN FT-4
Test Criteria	ANSI/ICEA S-104-696

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Loose Tube
Product Type	Dielectric
Flame Rating	Riser (OFNR)
Fiber Category	50 µm MM (OM4+)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	288
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	24
Number of Active Tubes	24
Buffer Tube Color Coding, Layer 1	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow
Buffer Tube Diameter	2.5 mm (0.1 in)
Tape	Water-swellable
Buffer Tube Color Coding, Layer 2	Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black*, Yellow*, Violet*, Rose*, Aqua*
Tape, Layer 2	Water-swellable

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Cable Design	
Tape, Layer 3	Flame-retardant tape
Tape, Layer 4	Water-swellable
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Weight	283 kg/km (190 lb/1000 ft)
Min. Bend Radius Installation	298.5 mm (11.7 in)
Min. Bend Radius Operation	199 mm (7.8 in)
Nominal Outer Diameter	19.9 mm (0.78 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 µm
Fiber Category	OM4 Extended Distance
Fiber Code	T
Performance Option Code	91
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	600 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	5350 MHz*km / -

** Assumes 0.7 dB maximum total connector/splice loss.*
** Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.*

Notes: 1) *50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.*
2) *Improved attenuation and bandwidth options available.*
3) *Bend-insensitive single-mode fibers available on request.*
4) *Contact a Corning Customer Care Representative for additional information.*

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Ordering Information

Part Number	288TUF-T4191D20
Product Description	FREEDM® Loose Tube, Gel-Free Cable, Riser, 288 F, 50 µm multimode, extended 10G distance (OM4)
EAN Code	4056418149240

RoHS COMPLIANT

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